

AMENDMENTS TO THE CLAIMS

Claims 1-141 (cancelled).

142. (Currently amended): A conditioning solution comprising:

a fluorine source, said fluorine source being selected from the group consisting of hydrofluoric acid, ammonium fluoride, and other fluorine donating chemicals;

a complementary acid, said complementary acid being selected from the group consisting of phosphoric acid, hydrochloric acid, and combinations thereof;

a non-aqueous solvent, said non-aqueous solvent being selected from the group consisting of tetrahydrofuran, propylene carbonate, and blends thereof; and

a surface passivation agent comprising ~~ascorbic~~ ascorbic acid, wherein said conditioning solution is substantially free of water, and said fluorine source, said complementary acid, said non-aqueous solvent and said passivation agent are present in said conditioning solution in concentrations suitable for the selective removal of residues relative to any exposed metal on a semiconductor substrate.

Claim 143 (cancelled).

144. (Previously presented): The solution of claim 142, wherein said passivation agent contributes to said selective removal by said solution by passivating said any exposed metal on said semiconductor substrate.

Claim 145 (cancelled).

146. (Previously presented): The solution of claim 142, wherein said fluorine source contributes to said selective removal by said solution by substantially remaining in molecular form.

147. (Previously presented): The solution of claim 146, wherein said complementary acid is present in sufficient amount to contribute to said fluorine source substantially remaining in molecular form.

148. (Previously presented): The solution of claim 142, wherein said fluorine source, said complementary acid, said passivation agent, and said non-aqueous solvent are present in said solution in sufficient concentrations to suppresses the solubility of aluminum fluoride.

Claim 149 (cancelled).

150. (Previously presented): A conditioning solution configured to selectively remove residues remaining on a semiconductor substrate after a dry etch process relative to exposed metal, said conditioning solution comprising:

hydrofluoric acid or ammonium fluoride;

hydrochloric acid or phosphoric acid;

tetrahydrofuan or propylene carbonate; and

ascorbic acid or ethylene diamine tetraacetic acid acting as a surface passivation agent, wherein said conditioning solution is substantially free of water.

151. (Previously presented): The solution of claim 150, wherein said conditioning solution is selective to the removal of said residues relative to exposed surfaces of metal lines over said semiconductor substrate.

152. (Previously presented): The solution of claim 150, wherein said passivation agent contributes to said selective removal by said solution by passivating said metal lines over said semiconductor substrate.

Claim 153 (cancelled).

154. (Previously presented): The solution of claim 150, wherein said hydrofluoric acid or ammonium fluoride are configured for said selective removal by said solution in that they remain substantially in molecular form.

155. (Previously presented): The solution of claim 154, wherein said hydrochloric acid or phosphoric acid is present in sufficient amount to contribute to said hydrofluoric acid or ammonium fluoride substantially remaining in molecular form.

156. (Previously presented): The solution of claim 150, wherein said hydrofluoric acid or ammonium fluoride, said hydrochloric acid or phosphoric acid, said ethylene glycol or propylene carbonate, and said ascorbic acid are present in said solution in sufficient concentrations to suppress the solubility of aluminum fluoride.

Claim 157 (cancelled).

158. (Allowed): A conditioning solution configured to remove residues remaining on a semiconductor substrate after a dry etch process relative to exposed metal, said conditioning solution consisting essentially of:

about 0.27% molecular HF and H_2F_2 ;

about 91.5% to about 97.5% propylene glycol;

about 6.5% H_2PO_4 or about 0.006% HCl;

about 0.25% citric acid; and

no more than about 2% water.

Claims 159-160 (cancelled).